

Title (en)  
QUANTUM DOT DIGITAL RADIOPHASIC DETECTION SYSTEM

Title (de)  
DIGITALES RADIOGRAFISCHES QUANTENPUNKT-DETEKTIONSSYSTEM

Title (fr)  
SYSTÈME NUMÉRIQUE DE DÉTECTION RADIOPHASIC À BOÎTE QUANTIQUE

Publication  
**EP 2972498 B1 20180502 (EN)**

Application  
**EP 13877590 A 20130315**

Priority  
US 2013031813 W 20130315

Abstract (en)  
[origin: WO2014142936A1] A digital quantum dot radiographic detection system described herein includes: a scintillation subsystem 202 and a semiconductor visible light detection subsystem 200, 200' (including a plurality of quantum dot image sensors 200a, 200b). In a first preferred digital quantum dot radiographic detection system, the plurality of quantum dot image sensors 200 is in substantially direct contact with the scintillation subsystem 202. In a second preferred digital quantum dot radiographic detection system, the scintillation subsystem has a plurality of discrete scintillation packets 212a, 212b, at least one of the discrete scintillation packets communicating with at least one of the quantum dot image sensors. The quantum dot image sensors 200 may be associated with semiconductor substrate 210 made from materials such as silicon (and variations thereof) or graphene.

IPC 8 full level  
**G01T 1/29** (2006.01); **G01T 1/20** (2006.01)

CPC (source: EP US)  
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EP4004603A4

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DOCDB simple family (publication)  
**WO 2014142936 A1 20140918**; CA 2902482 A1 20140918; CA 2902482 C 20161206; EP 2972498 A1 20160120; EP 2972498 A4 20161228;  
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**US 2013031813 W 20130315**; CA 2902482 A 20130315; EP 13877590 A 20130315; EP 18020107 A 20130315